

## CHAPTER I

### INTRODUCTION

*“Music gives a soul to the universe, wings to the mind, flight to the imagination and life to everything.” - Plato.*

Music is known as the universal language. Most people do not understand a foreign language but when music played, which is at its heart, no matter what the composer’s nationality is understood. “When words fail, music speaks” (**Hans Christian Anderson**). It is defined as being “The art or science of combining vocal or instrument (or both) to produce beauty form, harmony, and expression of emotion”. Music is the expression of emotion that is universally understood. This is true because music is intimately interconnected and basic to our existence-like the beat of music, our bodies are made up of rhythmic system (**Perlow Jacob, 2005**).

Music influence on the mind and body has been recorded from the earliest time (**Creek Jennifer, 1990**). The idea of music for healing is not a new one. Music has been used as a healing implement for centuries(**Misic, et al., 2010**). Music from the biblical accounts; King Saul was reportedly soothed by David’s harp music, and used as a tool of healing since ancient times, appearing in the writings of the Greek philosophers Pythagoras, Aristotle, and Plato (**Even Ruud, 2001**).However, the twentieth century discipline began during World War I, when both amateur and professional musicians of all types visited veteran’s hospitals to perform for the thousands suffering physical and emotional war traumas. It was the early Greek that first put forward of the theory of music as a curative therapy as far back as the 16<sup>th</sup> century. They were the first to use music to relax patients suffering from chronic ailments and to soothe the poor people who needed to undergo surgical methods. It must be noted that anaesthesia have not discovered at that time, and music did the job of calming the nerves of the person undergoing the surgeon’s knife (**Jupiter information,2008**).

Michigan State University responded in 1944, when it offered the first music therapy degree program in the world. In 1950, the National Association for Music Therapy (NAMT) chartered its membership. In 1971, the American Association for Music therapy (AAMT) developed. In 1985, the World Federation of music Therapy Incorporated (WFMT) formed to promote music therapy worldwide. The American Therapy Association (AMTA) was founded in 1988 **(Canadian Association, 2005)**.

The roots of musical therapy in India can be traced back to ancient Hindu mythology, Vedic texts, and local folk traditions **(Cook, et al., 1997)**. Music Therapy in India has a rich history of its own and is just an emerging discipline in India that warrants more research in this area to make it evidence based **(Sumathy, et al., 2005)**.

Music therapy can reduce psychological stress, pain, anxiety, and isolation. Appropriate music produces the relaxation response, often removing a client's inner restlessness and quieting ceaseless thinking. It is used as a healing technique to quiet the mind and bring about inner relaxation **(Guzzetta, C., 2005)**.

There are two principle ways of doing music therapy 'Active music therapy' which requires that the patients play musical instruments, or sing, with the therapist and 'Passive music therapy' whereby the patients listen to the therapist who plays live, or recorded music to them. There are no potentially harmful or toxic effects **(Aldridge, 1994)**. Music listeners can use audiotapes to promote distraction and relaxation and to alter mood disturbances such as anxiety, depression, fear, anger, and sadness **(Magill-Levreault, 1993; Tuls Halstead, et al., 2002)**. Music therapy may involve either listening to or performing, with or without the presence of music therapist **(American Music Therapy Association, 2009)**.

From the ancient period, people have found ways to alter their bodies and their consciousness by taking substances such as herbs, alcohol, and drugs. People who were unable to restrict their use of mind and body altering substances to culturally prescribed limits, and who have fallen into the trap we know today as addiction. Addiction usually does not happen overnight. Rather, people who become addicted to

alcohol are gradually introduced and desensitized to them over a period of time. The age of peak onset of alcohol problems severe enough to lead to a diagnosis of alcohol dependence is probably in the middle 20's to approximately 40 years of age, (**Kaplan, et al., 2005**).

An alcohol is a drink that contains ethanol, a type of alcohol produced by fermentation of grains, fruits or other sources of sugar. There are various types of alcoholic beverages and the concentration of ethanol differs across preparations. The types of alcoholic beverages in India are listed below.

<b>Alcoholic Beverages</b>	<b>Source</b>	<b>Alcohol content (% ABV)</b>	<b>Absolute Alcohol</b>	<b>Standard Drinks</b>
Beer (Standard)	Cereals	3-4	2.3 -3.1	300-400 ml
Beer (Strong)	Cereals	8-11	6.2-8.6	100-150ml
Wine	Grapes (other fruits)	5-13	3.9-10.1	100-250ml
Fortified wine	Grapes (other fruits)	14-20	10.9-15.9	60-90 ml
Distilled Spirits	Fruits, cereals sugarcane.	40	31.2	30 ml
Arrack	Coconut flowers, sugarcane, grain.	33	25.7	40 ml
Toddy	Palm sap, coconut flowers.	5-10	3.9-7.8	200 ml
IndianMade Foreign Liquor (IMFL)	Molasses, grain.	42.8	33.4	30 ml

Based on combined data from SAMHSA's 2004–2005 National Surveys on Drug Use & Health, the rate of past year alcohol dependence or abuse among persons aged 12 or older varied by level of alcohol use: 44.7% of past month heavy drinkers, 18.5% binge drinkers, 3.8% past month non-binge drinkers, and 1.3% of those who did not drink alcohol in the past month met the criteria for alcohol dependence in the past year. Males had higher rates than females for all measures of drinking in the past month: any alcohol use (57.5% vs. 45%), binge drinking (30.8% vs. 15.1%), and

heavy alcohol use (10.5% vs. 3.3%), and males were twice as likely as females to have met the criteria for alcohol dependence or abuse in the past year (10.5% vs. 5.1%) (**NSDUH Report, 2012**).

The World Health Organization estimates that as of 2010 there were 208 million people with alcoholism worldwide (4.1% of the population over 15 years of age) (**WHO, 2014**). The global status report on alcohol 2004 is the second global status report on alcohol published by WHO. As per WHO two billion people worldwide consume alcohol and 76.3 million have diagnosed alcohol related disorders. Alcoholism directly resulted in 139,000 deaths in 2013 up from 112,000 deaths in 1990 (**GBD, 2013**).

According to the National Institute of Health (NIH) in 2015, 15.1 million American adults (6.2 percent of the population) had an alcohol use problem and according to the World Health Organization, globally 3.3 million deaths every year result from the harmful use of alcohol (**Christian Nordquist, 2018**).

India occupies the 150<sup>th</sup> position among the 184 countries when it comes to alcohol consumption (**Sharma Sanchita, 2010**). According to national scenario, it is estimated about five million people dependent on alcohol (**Arora, M., 2002**). State wise pattern of alcohol consumption in India- Andhra Pradesh (11.8%), Bihar (17.4%), Gujarat (3.9%), Haryana (8.3%), Himachal Pradesh (16.7%), Karnataka (3.3%), Kerala (7.5%), Madhya Pradesh (12.1%), Maharashtra (5.8%), Orissa (10.2%), Punjab (17.4%), Rajasthan (8.6%), Tamil Nadu (8.1%), Uttar Pradesh (4.0%), Westbengal (4.5%), North Eastern Region (15.7%) (**Maha's, 2000**). Andhra Pradesh is by far Indian's biggest drinking state, consuming 665ml per capita per week on average, or nearly 34.5 litres per year, across types of alcohol (**Rukmini S, 2014**). 30% of Indian population consumes alcohol regularly. 11% Indian are moderate to heavy drinkers. Dadra and Nagar Haveli, Arunachal Pradesh, Andaman and Nicobar Islands, Andhra Pradesh, Daman and Diu, Sikkim, and Puducherry are clearly among the highest consumers of alcohol and spirits in the country. 3.3 million deaths in India were attributed to alcohol consumption (**WHO, 2014**).

Emerging trends in north-eastern states indicates that alcohol abuse is turning out to be the most serious health problem affecting young people in northeast and could be even more serious than drug abuse (**Bengal, 2005**). In 2005, Prevalence of alcohol use in Arunachal Pradesh was reported 75% (**Expressindia forum,2008**). The state of Nagaland, Manipur and Mizoram leads the pack on alcohol consumption (**KarinthayalChacko, 2009**). 74% of the people in the state of Nagaland were enslaved by alcohol (**Nagaland post, 2009**).

Although alcohol is freely available in most part of India, some states and union territories in the country have various forms of alcohol bans in force. Gujarat is one of the first states of India to have a no alcohol policy. Alcohol consumption is prohibited in all the islands of Lakshadweep, except on Bangaram. Manipur government banned the sale of alcohol in the state in April 1991. Sale and consumption of alcohol has been prohibited in the state of Nagaland since 1989 (**WHO, 2014**). After 23 years of prohibition act, Nagaland has remained a wet state in the country - made foreign liquor (IMFL) has increased manifold through liquor barons and bootleggers (**The Telegraph, 2012**). The Nagaland government is in a constant tussle on lifting the Nagaland total lifting liquor prohibition Act of 1989 (**DNA India, 2014**).

### **Academic rationale of the study**

The field of Music Therapy is increasingly gaining more attention in health related issues. The applications of music in various settings have been found to have potentials benefits. To enable a healthy living, music therapy as an important strategy and resource increasingly engages the attention of researchers in various fields like Psychology, Musicology and Neurology and general Medical practitioners, Musicians, and Music therapists (**SundarSumathy, 2005**). Therefore, social sciences and humanities as a profession that concern on human values, a study in the field of Music therapy will help the professional to gain an insight into music therapy.

**Dingle GA, et al., (2008)** conducted a study of 7-week trial music therapy, to analyse the effect of cognitive behaviour for substance abuse with the aim of increasing patient engagement in a group programme. Patient attendance rates and perceptions of the music therapy were collected at the end of each session by an anonymous survey. The results indicate that enjoyment and motivation to participate during the sessions was uniformly high (75%). Music therapy is a promising approach to improving engagement in substance abuse treatment groups. Addiction is an interesting and in some ways also slightly mystical phenomenon. What makes a person become addicted to something? And how can one release oneself from an addiction? These questions have intrigued the researcher for many years (**Marko P, 2007**). Therefore, the investigator felt the importance to study the effectiveness of Music therapy in alcohol dependence.

Alcoholism is a worldwide problem of substantial proportions. Alcohol addiction are on the increase every year, the greatest cost of addiction however, is on the lives of the users and their families. Alcohol addiction is a pervasive and complex disorder that can often affect numerous aspects of an individual's day to day functioning (**Heldigan, J, 2005**). More than just a pleasant past time or amusing distraction, music can help adolescents in recovery from drug or alcohol addiction. "Music can help them to understand why they turned to drugs and alcohol and work through the emotions in new creative way" (**Tubman Andy**). Alcohol abuse is one of the main killers of young men in Nagaland today. However, its real impact is on the social and family dynamics that underline its communities. Therefore, Alcoholism, as a burning issue in today's generation and growing concern problem in Nagaland, the investigator felt the importance and needs of the research study in Nagaland with the alcoholic dependent clients.

### **Statement of the problem**

The impact of music on alcohol dependent clients in reducing depression, anxiety, stress, and alcohol craving: A study in de-addiction centre of Kohima, Nagaland.

## Objectives of the study

The following are the objectives of the present study

1. To assess the depression, anxiety, stress, and craving for alcohol among clients with alcohol dependence.
2. To determine the effectiveness of music therapy in reducing depression, anxiety, and stress among alcohol dependent clients.
3. To identify the reduction of craving for alcohol among clients with alcohol dependence.

## Hypotheses

1. **H<sub>1</sub>**: The mean anxiety score of the experimental group will be significantly reduced from the mean anxiety score of the control group after the intervention of music therapy.

**H<sub>01</sub>**: There will be no significant difference in the mean anxiety score from baseline to endpoint in the experimental group when compared to the control group.

2. **H<sub>2</sub>**: The mean depression score of the experimental group will be significantly reduced from the mean depression score of the control group after the intervention of music therapy.

**H<sub>02</sub>**: There will be no significant difference in the mean depression score from baseline to endpoint in the experimental group when compared to the control group.

3. **H<sub>3</sub>**: The mean stress score of the experimental group will be significantly reduced from the mean stress score of the control groups.

**H<sub>03</sub>**: There will be no significant difference in the mean stress score from stress score from baseline to endpoint in the experimental group when compared to the control group.

4. **H<sub>4</sub>**: The mean craving score of the experimental group will be significantly reduced from the mean craving score of the control group after the intervention of music therapy.

**H<sub>04</sub>**: There will be no significant difference in the mean alcohol urge questionnaire score from baseline to endpoint in the experimental group when compared to the control group.

### **Assumptions**

The following are the assumptions of the present study:

1. Alcohol dependence leads to more craving for alcohol.
2. Emotional problems like depression, anxiety, and stress are more in alcoholic dependents.
3. Alcohol clients for the study are honest and cooperative in their responses.
4. The choice of Mozart classical music is an appropriate intervention for alcohol dependent clients.

### **Operational Definition of Terms**

**Effectiveness:** Effectiveness is the desired change in anxiety, stress, depression, and decrease in craving for drinks brought by the music therapy as measured by Depression Anxiety Stress Scale and Alcohol Urge Questionnaire.

**Music:** Music is the organization of sounds and tunes with beat, rhythm, and duration which gives out a melody sounds to listen.

**Music therapy:** Playing Mozart (Sonata K 448) lasting for 15 minutes, 3 days in a week for a month as intervention through head phone to the experimental group.

**Alcohol dependence:** Alcohol dependence is a primary chronic disease with genetic, psychosocial and environment factors influencing its development and manifestations.



For this study, alcohol abuse is considered as combined with tolerance, withdrawal, and an uncontrollable drive to drink and is measured by Alcohol Use Disorder Identification Test.

**Alcohol misuse:** Alcohol misuse describes alcohol consumption that puts individuals at increased risk for adverse health and social consequences.

It is defined as excess daily consumption, more than 14 drinks per week for men or more than 7 drinks per week for women.

**Depression:** Depression is a common mental disorder, characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feeling of tiredness, and poor concentration.

Depression is used as a mood disturbance among individuals who are alcohol dependent and is measured by Depression Anxiety Stress Scale.

**Anxiety:** Anxiety is an abnormal and overwhelming sense of apprehension and fear often marked by physical signs (such as tension, sweating, and increased pulse rate), doubt concerning the reality and nature of the threat, and by self-doubt about one's capacity to cope with it.

Anxiety used in the context of an emotional disturbance among individuals who are alcohol dependent and is measured by Depression Anxiety Stress Scale.

**Stress:** Stress is a state of psychological and physiological imbalance resulting from the disparity between situational demand and the individual's ability and motivation to meet those needs.

For this study, stress is considered to physical or emotional tension among individuals who are alcohol dependent and is measured by Depression Anxiety Stress Scale.

**Craving/ urge:** The desire for more of a substance, consisting of a desire to experience the euphoric effects, as well as the desire to avoid the withdrawal aspects of abstinence.

Craving or Urge is used to a loss of control over drinking and a tolerance for alcohol among individuals who are alcohol dependent and is measured by Alcohol Urge Questionnaire.

### **Conceptual framework**

The present study is focused to find out the effectiveness of music therapy in reducing depression, stress, anxiety, and craving for drinks in alcohol dependent clients. The framework of the study is based on General systems theory developed by Ludwig von Bertalanffy in 1968 treats its subject matters as consisting of component parts and their interrelationships. The focus is on the discrete parts and this relationship which makes up and describes the whole i.e., the system (fig 1).

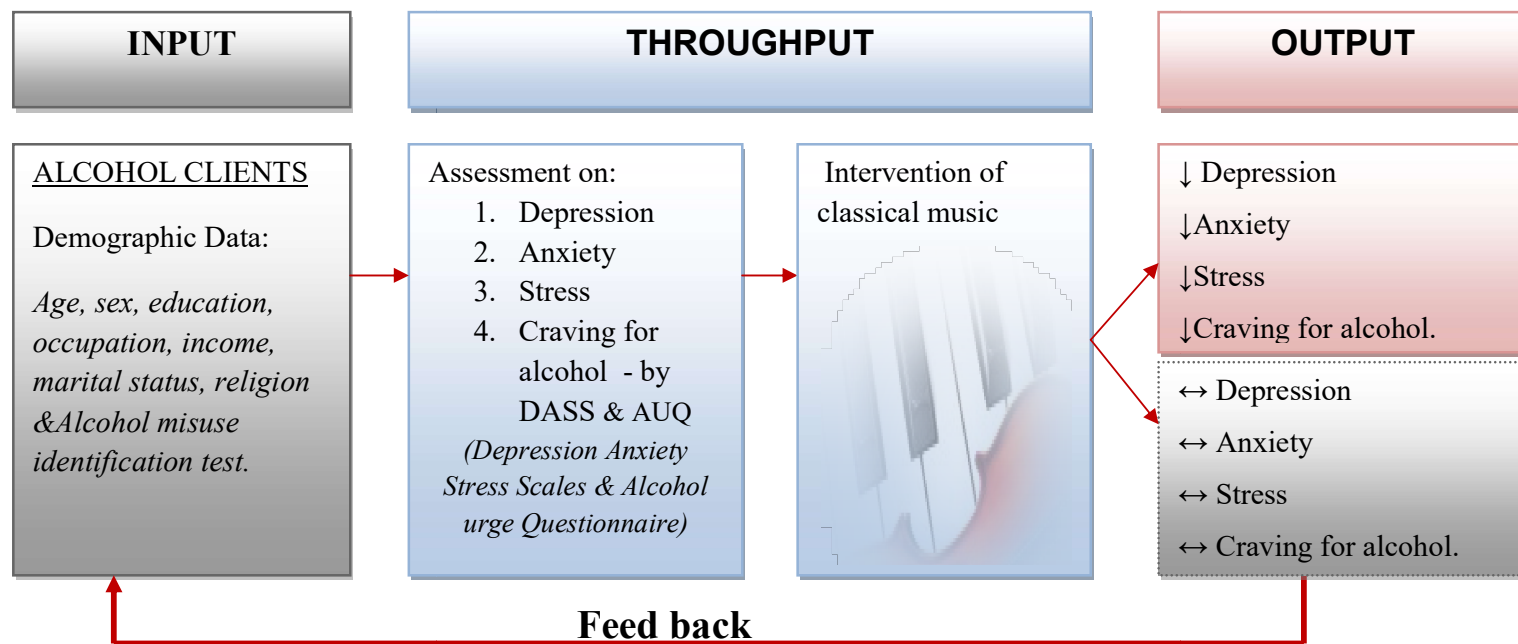
The investigator provided classical music to alcohol dependent clients who showed depression, anxiety, stress, and craving from alcohol. The system comprises of Input, throughput, output, and feedback.

**Input:** The input process is identifying clients with alcohol misuse and assessing depression, anxiety, stress, and craving for alcohol.

**Throughput:** In the throughput process, the investigator organized the process of assessing the anxiety, stress, depression, and craving for alcohol, and studies the impact of classical music on anxiety, stress, depression, and craving from alcohol among alcohol dependent clients.

**Output:** A system in which the investigator assessed the output of the intervention. Here, the output implies the impact on anxiety, stress, depression, and degree of craving for alcohol among the alcohol dependent clients after the intervention of classical music. These responses or output provide feedback for the system.

**Feedback:** Feedback identifies the effectiveness or ineffectiveness of music therapy intervention to the alcohol dependent clients.



**Fig 1: Conceptual frame work based on Ludwig von Bertalanffy's (1968)**

**SUMMARY:**

This chapter explained the background of the study, need for the study, statement of the problem, objectives, hypotheses, assumptions, operational definition of terms, conceptual framework.